

Can Animals Think?

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BEFORE YOU READ

Informational Focus: Argument

A **claim** is the position a writer takes on an issue. A writer creates an **argument**, a series of persuasive details, to support his or her claim. The writer of the article you are about to read thinks that animals demonstrate more intelligence than most people give them credit for. Eugene Linden presents four examples of intelligent behavior by animals. He also explores the idea that animals will apply their intelligence to serve their own purposes, not to please a scientist. He presents a series of examples, or evidence, to defend this claim.

An **argument** usually consists of a mixture of logical and emotional appeals: It appeals to both our hearts and our minds. Writers build **logical appeals** by presenting facts and statistics. Writers create **emotional appeals** through the use of loaded words and their **connotation** creating an emotional reaction in the reader.

Generalizations are broad statements about something or someone. Some generalizations can be supported, but others are unfair statements that reflect bias or unsound thinking.

- As you read, consider and identify the writer's argument. What is the point he or she is making?
- Distinguish between logical and emotional appeals as you evaluate the writer's evidence.
- Identify generalizations, and decide whether or not they are justified.

Reading Skills: Identifying the main idea

"Can Animals Think?" is divided into sections. Each section contains a main idea and evidence that supports it. As you read, pause at the end of each section. Then, identify the main idea of the section, and state it in your own words.

To identify a main idea:

- Look for key statements that express the writer's opinion. Identify details that support this main idea.
- State the main idea in your own words.

Can Animals Think?

The first time Fu Manchu broke out, zookeepers chalked it up to human error. On a balmy day, the orangutans at the Omaha Zoo had been playing in their big outdoor enclosure. Not long thereafter, shocked keepers looked up and saw Fu and his family hanging out in some trees near the elephant barn. Later investigation revealed that the door that connects the furnace room to the orangutan enclosure was open. Head keeper Jerry Stones chewed out his staff, and the incident was forgotten. But the next time the weather was nice, Fu Manchu escaped again. Fuming, Stones recalls, "I was getting ready to fire someone."

The next nice day, alerted by keepers desperate to keep their jobs, Stones finally managed to catch Fu Manchu in the act. First, the young ape climbed down some air-vent louvers into a dry moat. Then, taking hold of the bottom of the furnace door, he used brute force to pull it back just far enough to slide a wire into the gap, slip a latch and pop the door open. The next day, Stones noticed something shiny sticking out of Fu's mouth. It was the wire lock pick, bent to fit between his lip and gum and stowed there between escapes.

Fu Manchu's jailbreaks made headlines in 1968, but his clever tricks didn't make a big impression on the scientists who specialize in looking for signs of higher mental processes in animals. At the time, much of the action in animal intelligence was focused on efforts to teach apes to use human languages. No researcher cared much about ape escape artists.

And neither did I. In 1970, I began following studies of animal intelligence, particularly the early reports of chimpanzees who learned how to use human words. The big breakthrough in these experiments came when two psychologists, R. Allen and Beatrice Gardner, realized their chimps were having trouble forming word-like sounds and decided to teach a young female named Washoe sign language instead. Washoe eventually learned more than 130 words from the language of the deaf called American Sign Language.

Washoe's success spurred more language studies and created such ape celebrities as Koko the gorilla and Chantek the orangutan. The work also set off a fierce debate in scientific circles about the nature of animal

ARGUMENT

Pause at line 22. The article opens with a humorous story, what is it?

ARGUMENT

Is the opening humor a type of **logical** or **emotional appeal**? How does this story get the reader thinking about the main idea?

DETAILS / READING COMPREHENSION

What big breakthrough did the researchers see in lines 25-29?

intelligence--one that continues to this day. Indeed, it has been easier to defeat communism than to get scientists to agree on what Washoe meant three decades ago when she saw a swan on a pond and made the signs for "water bird." Was she inventing a phrase to describe waterfowl, or merely generating signs vaguely associated with the scene in front of her?

I began to wonder whether there might be better windows on animal minds than experiments designed to teach them human signs and symbols.

When I heard about Fu Manchu, I realized what to me now seems obvious: if animals can think, they will probably do their best thinking when it serves their purposes, not when some scientist asks them to.

Lending a Helping Tail

Why would an animal want to cooperate with a human? The behaviorist would say that animals cooperate when, through reinforcement, they learn it is in their interest to cooperate. This is true as far as it goes, but I don't think it goes far enough. Certainly with humans, the intangible reinforcement that comes with respect, dignity and accomplishment can be far more motivating than material rewards.

Gail Laule, a consultant on animal behavior with Active Environments Inc., uses rewards to encourage an animal to do something, but also recognizes that animals are more than wind-up toys that blindly respond to tempting treats. "It's much easier to work with a dolphin if you assume that it is intelligent ... That was certainly the case with Orky," says Laule, referring to her work with one of the giant dolphins called orcas or killer whales. "Of all the animals I've worked with, Orky was the most intelligent ... He would assess a situation and then do something based on the judgments he made."

Like the time he helped save a member of the family. Orky's mate Corky gave birth in the late 1970s, but the baby did not thrive at first, and the keepers took the little killer whale out of the tank by stretcher for emergency care and feeding. Things began to go awry when they returned the orca to the tank. The boom operator halted the stretcher when it was still a few feet above the water. Suddenly the baby began throwing up, through both its mouth and its blowhole. The keepers feared it would aspirate some vomit, which could bring on a fatal case of pneumonia, but they could not reach the baby dangling above.

CLAIM / MAIN IDEA

Underline, in lines 40-42, the author's main idea or claim. Explain how the stories of Fu Manchu, Washoe, and Koko led the author to make this claim.

DETAILS

Are the details in lines 25-37 a type of **logical** or **emotional appeal**? Explain.

CLAIM

What claim does the author make in lines 46-47?

DETAILS / READING COMPREHENSION

What ability did the scientist see in Orky? Underline where you see this.

Orky had been watching the procedure, and, apparently sizing up the problem, he swam under the stretcher and allowed one of the men to stand on his head. "This was remarkable," says Tim, "since Orky had never been trained to carry people on his head like Sea World's Shamu." Then, using the amazing power of his tail flukes to keep steady, Orky provided a platform that allowed the keeper to reach up and release the bridle so that the 420-lb. baby could slide into the water within reach of help.

DETAILS / READING COMPREHENSION

What remarkable thing did Orky do that demonstrated intelligence and the ability to reason?

The Keeper Always Falls for That One

A sad fact of life is that it is easier to spot evidence of intelligence in devious behavior than in acts of cooperation or love. Sophisticated acts of deception involve the conscious planting of false beliefs in others, which in turn implies awareness that others have mental states that can be manipulated. British psychologist Andrew Whiten of the University of St. Andrews in Scotland says this ability is a "mental Rubicon" dividing humans and at least the other great apes from the rest of the animal kingdom.

CLAIM

Restate the claim the author makes in the opening of the third section.

While psychologists have studied various forms of animal deception, zookeepers are its targets every day. Helen Shewman, of the Woodland Park Zoo in Seattle, Wash., recalls that one day she dropped an orange through a feeding porthole for Meladi, one of the female orangutans. Instead of moving away, Meladi looked Helen in the eye and held out her hand. Thinking that the orange must have rolled off somewhere inaccessible, Helen gave her another one. When Meladi shuffled off Helen noticed that she had hidden the original orange in her other hand.

DETAILS / READING COMPREHENSION

How did Tawan "learn" and demonstrate intelligence?

GENERALIZATION

Underline the generalization the author makes in lines 93-95. Do you agree or disagree with this generalization?

Tawan, the colony's dominant male, watched this whole charade, and the next day he too looked Helen in the eye and pretended that he had not yet received an orange. "Are you sure you don't have one?" Helen asked. He continued to hold her gaze and held out his hand. Relenting, she gave him another, then noticed that he had been hiding his orange under his foot.

CONCLUSION

Underline the final sentence. Is this ending **logical** or **emotional**? Why would the author end the article with this type of **appeal**?

Countless creatures draw on their abilities not only to secure food and compete with their peers, but also to deal with, deceive and beguile the humans they encounter. Every so often, they do something extraordinary, and we gain insight into our own abilities, and what it's like to be an orangutan or an orca.

Name _____ period _____